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SANTA BARBARA · SANTA CRUZ

A Tribute to the People of California

DONNER LABORATORY AND DONNER PAVILION

BERKELEY, CALIFORNIA 94720

July 8, 1968

Dr. Joshua Lederberg
Department of Genetics
Stanford University
Stanford, California

Dear Joshua,

Many thanks for the columns. It's nice to see that the general public is getting educated on things that really matter! I had heard about the Xeroderma pigmentosum stuff, and was especially pleased about it, since I had pulled it out of the textbooks a couple of years ago, as a human disease that might involve a genetic repair defect, and have been mentioning it to my medical students to try to keep their interest in bacterial repair studies a bit livelier. So it will be good to be able to show them some evidence indicating that this is really so.

About caffeine, I hope you will not mind if I straighten out a slight inaccuracy about the sequence of events. The first report describing enhancement of lethal and mutagenic effects of caffeine was my 1958 paper (which may carry a 1959 date in its published form) given at the X Congress of Genetics. Three years later, at the 1961 Oak Ridge Symposium, I described similar results for acriflavine and other basic dyes, and offered the interpretation that caffeine, acriflavine and the other UV-enhancers were interfering with an enzymatic dark repair process normally operating to remove UV damage from DNA. Later that year, Lieb wrote a paper on caffeine, confirming my 1958 observation, and coming to the same conclusion -- that caffeine enhances UV effects by blocking dark repair. Ce n'est pas grande chose, but I thought you would prefer to know that it wasn't quite right as you had it. Better fire your researcher!

I hope you and Marguerite are settling into your new house. We still plan to call you about having dinner in S.F. one evening, probably quite soon.

Regards from Hy, too, to all of you.

Sincerely,

A handwritten signature in cursive script, appearing to read "Paul Berg".

WITKIN